



Summary of February 2021 NAMs-focused BOSC meeting

Office of Research and Development

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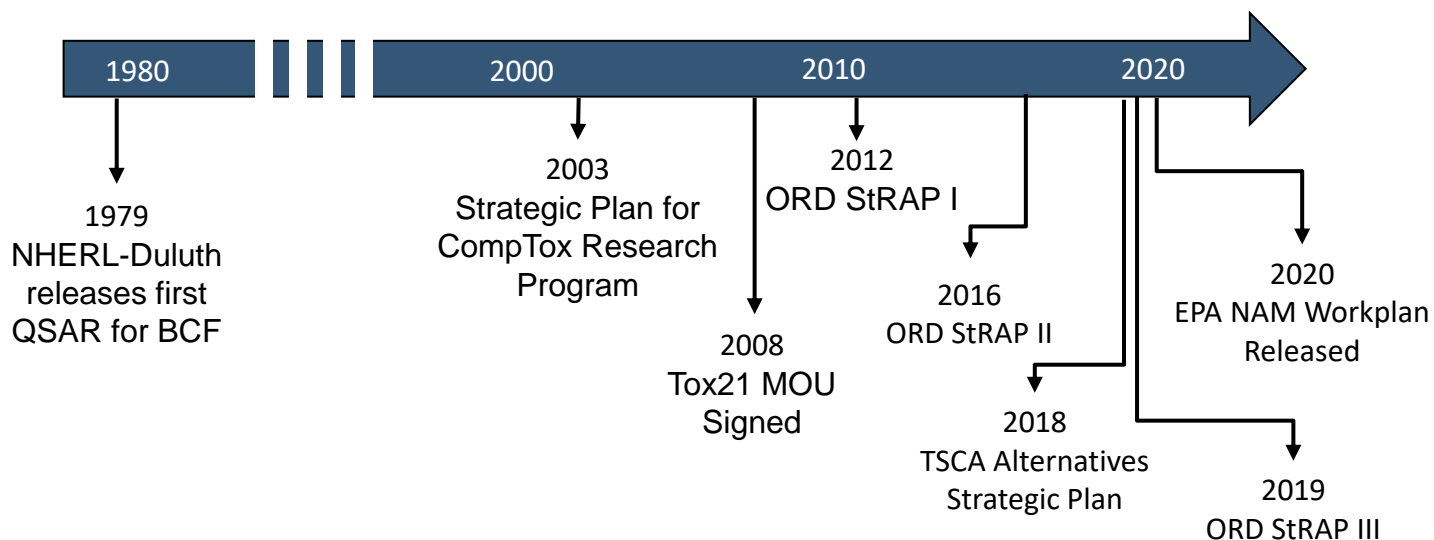
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Chemical Safety for Sustainability

November 4, 2021

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ORD History of Research on NAMs



Board of Scientific Counselors (BOSC) Chemical Safety Subcommittee Implementation Meeting: February 2, 2021

Topic	Research Areas	Outputs	Products	Presentations
Chemical Evaluation	High-Throughput Toxicology (HTT)	8	36	Sessions 1A; 1C; 1D; 2
	Rapid Exposure Modeling and Dosimetry (REMD)	8	50	Session 1B; 2; 3
	Emerging Materials and Technologies (EMT)	2	13	
Complex Systems Science	Adverse Outcome Pathways (AOP)	8	42	Session 2
	Virtual Tissue Modeling (VTM)	3	16	Session 1D
	Ecotoxicological Assessment and Modeling (ETAM)	10	34	Session 1C
Solutions-Based Translation and Knowledge Delivery	Chemical Safety Analytics (CSA)	4	24	Session 3
	Informatics, Synthesis, and Integration (ISI)	5	29	Sessions 2; 3

CSS Research Areas that support work on NAMs.

“The breadth of the research portfolio is remarkable and the relevance of the various outputs and products to the mission of CSS and ORD is clear.”

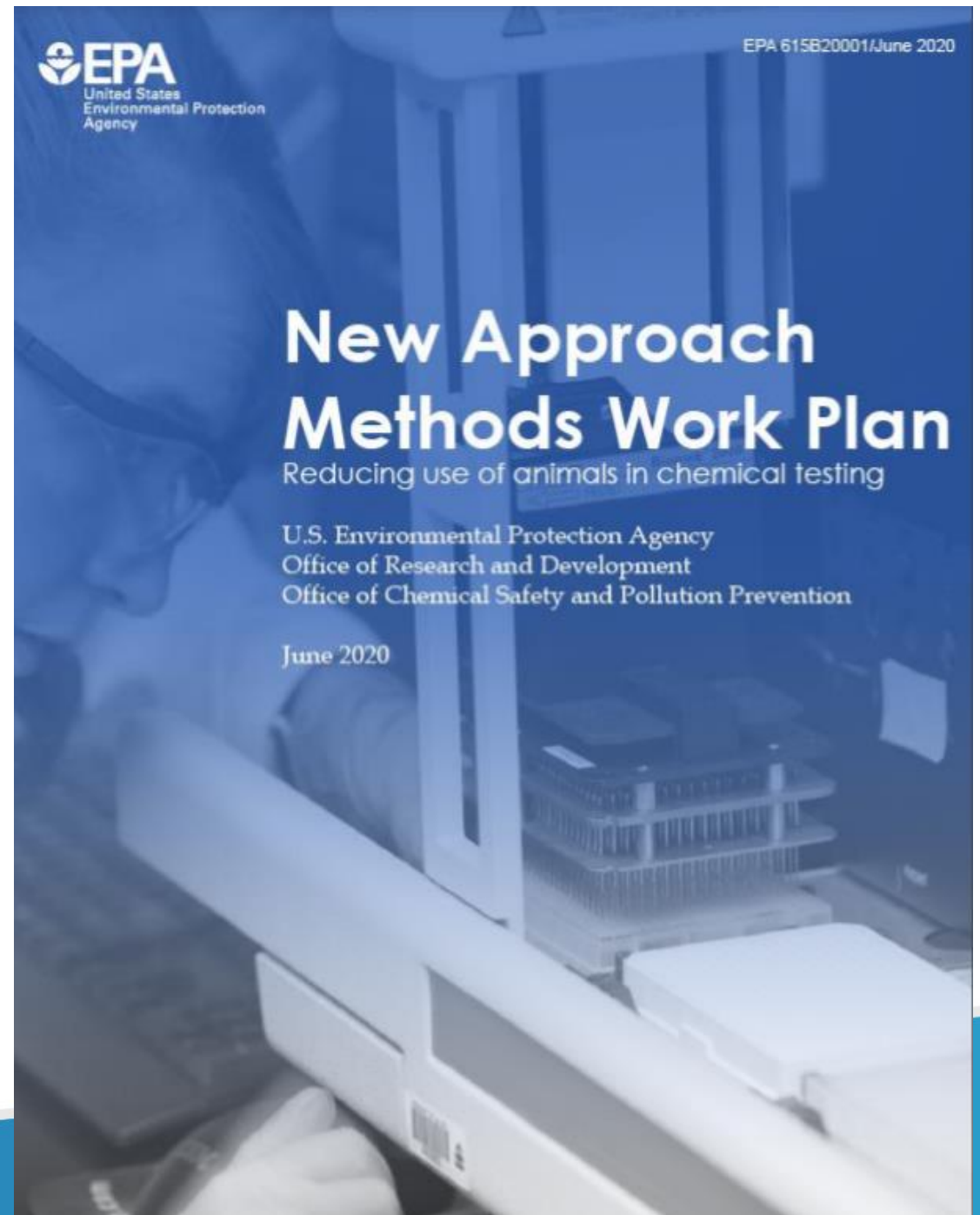
“NAMs are at the heart of the research portfolio and delivering NAMs is critical to the success of CSS and ORD.”

“On the one hand, the breadth of the NAM portfolio offers great opportunity to transform safety evaluation by producing relevant NAM-derived values for thousands of poorly characterized chemicals as well as relevant points of departure information for assessment focused on particular chemical classes. On the other hand, there may be challenges in managing such a broad portfolio from inception, through research and development, validation and application in risk assessments.”

BOSC feedback is a valued part of the StRAP development and implementation process

EPA NAMs Workplan outlines stages of development, deliverables, and timelines

<https://www.epa.gov/chemical-research/epa-new-approach-methods-work-plan-reducing-use-animals-chemical-testing>



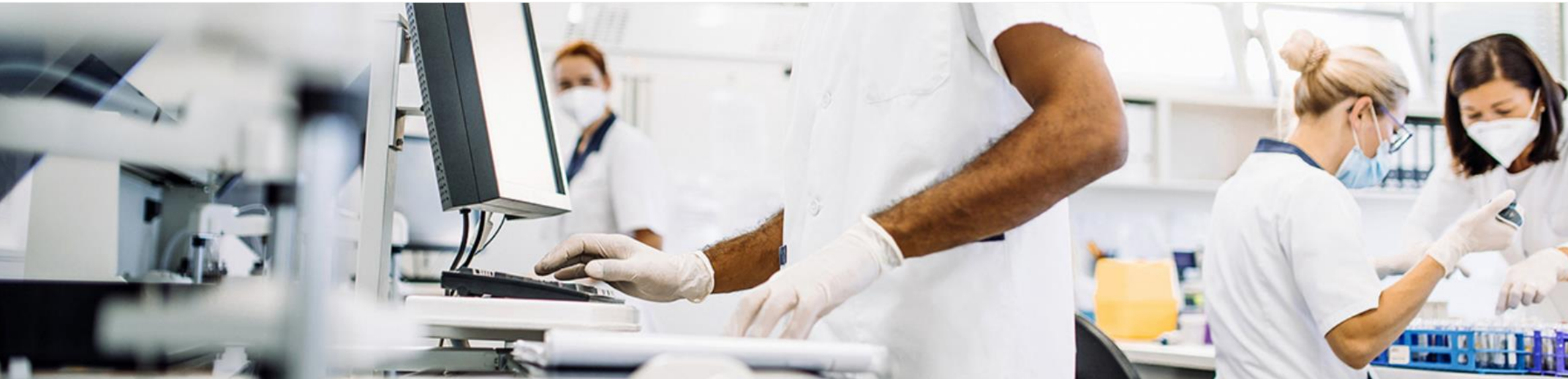


Current and future research will focus on NAMs research to support the data, model, and tool needs of CSS partners.

Ad hoc NASEM committee

Variability and Relevance of Current Laboratory Mammalian Toxicity Tests and Expectations for New Approach Methods (NAMs) for use in Human Health Risk Assessment

<https://www.nationalacademies.org/our-work/variability-and-relevance-of-current-laboratory-mammalian-toxicity-tests-and-expectations-for-new-approach-methods--nams--for-use-in-human-health-risk-assessment>



Data-driven Continuous Improvement

Ensuring relevancy and appropriate use of resources

- *Annual ORD review to align needs, activities, and funding*
- *StRAP planning focuses on meeting partner needs*

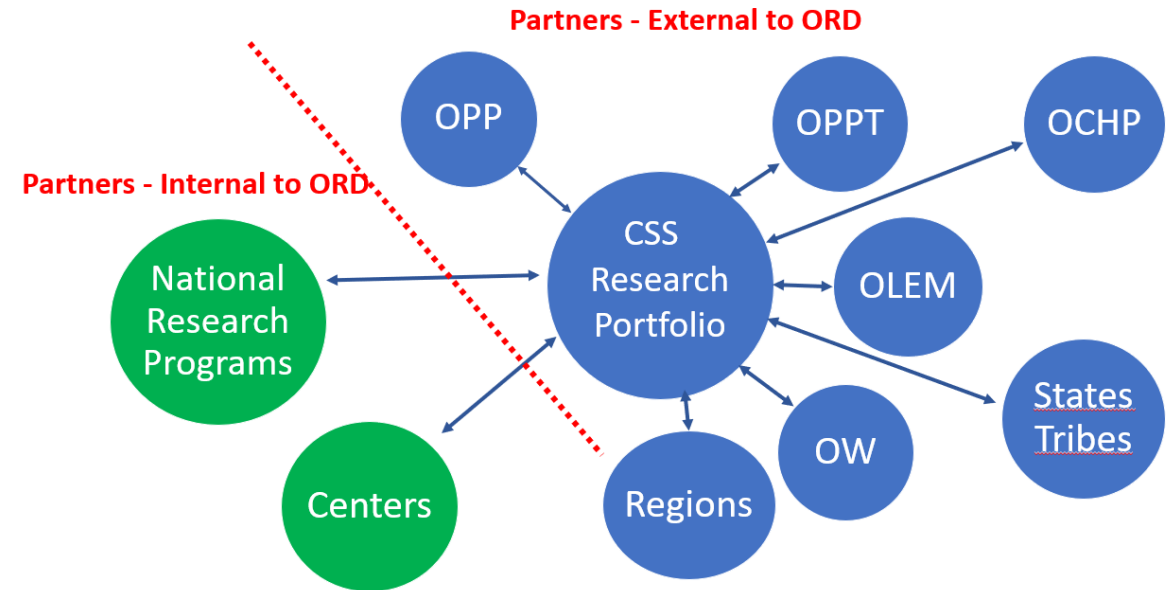
User metrics to inform upgrades

- *Evidence-based approach to inform tool development*
- *Google Analytics to improve existing products (e.g., CompTox Chemicals Dashboard, Factotum, ECOTOX, SeqAPass)*
- *Informs new tool development*

CSS Charge Questions Build Upon Previous BOSC Recommendations

“Continuing and broadening partner participation in RACTs is key to effective communication between CSS and partners regarding needs, product development, and two-way feedback.”

This meeting transitions to presenting on solutions-driven translation research across the CSS portfolio.





Thank you!

Questions?

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